MASS. Y3. MPl : F49

April 1989

UMASS/AMHERST
312066 0284 3561 2

GOVERNMENT DOCUMENTS
COLLECTION

AUG 1 C 1989

University of Massachusetts
Depository Copy

Final Report of the
North Shore Transportation Task Force

Description of Regional Issues and Priorities

872/356

Metropolitan Area Planning Council
60 Temple Place
Boston, MA 02111

Digitized by the Internet Archive
in 2015

https://archive.org/details/finalreportofnor00nort

FINAL REPORT OF THE NORTH SHORE TRANSPORTATION TASK FORCE

Description of Regional Issues
and
Priorities

April 1989

Prepared By
The
Metropolitan Area Planning Council

CREDITS

MAPC Project Team:

Carol Blair, Transportation Program Manager
Daniel Fortier, Principal Transportation Planner
Michele Morse, Word Processing
Russ Brami, Jonathan Cheney, Report Graphics
Ethel Shepard, Sandra Lenzi, Report Editing
Sam Powell, Report Production

MAPC Executive Director: David C. Soule

MAPC Officers:

Frank E. Baxter, President
Franklin C. Ching, Vice President
Marjorie A. Davis, Secretary
Martha Gjesteby, Treasurer

The Metropolitan Area Planning Council would like to thank the Massachusetts Department of Public Works for their review of this report.

The study documented here was financially supported by the Massachusetts Department of Public Works (Contract #88007) and the Urban Mass Transportation Administration (Contract #MA-08-0144).

North Shore Transportation Task Force Officers for 1988:

Marjorie Davis, Chairperson
Richard Kassiotis, Vice Chairperson
Mark Regan, Secretary

North Shore Transportation Task Force Designees

Beverly
Mitch Korbey, Planning Director - Mayor's Designee
Raymond Banistell, Board of Alderman

Danvers
John Crowley, Board of Selectmen
Mark Regan, Director of Community Development

Essex
James O. Barrett, Jr., Board of Selectmen

Gloucester
Eugene Wallace, Cape Ann Transit Authority, Mayor's Designee

Hamilton
Statler Gilfillen, Board of Selectmen's Designee

Ipswich
David Player, Board of Selectmen
Elizabeth Ware, Town Planner

Manchester
Robert Atwater, Planning Board
Richard Delaney, Board of Selectmen

Marblehead
Arnold Anderson, Board of Selectmen
James Bishop, Planning Board

Middleton
Richard Kassiotis, Board of Selectmen

Peabody
Clare Hurley, Assistant Director for Planning, Mayor's Designee

Rockport
Nicola Barletta, Board of Selectmen
Tacy San Antonio, Planning Board

Salem
    Peter Bulter, Planning Department, Mayor's Designee

Swampscott
    Robert Perry, Board of Selectmen

Topsfield
    Holger Luther, Board of Selectmen

Wenham
    Marjorie Davis, Board of Selectmen
    William Shailor, Board of Selectmen

Table of Contents

Preface

Executive Summary

I Transportation Network Description

- A. Highways
- B. Transit
  - 1. MBTA
    - a. Buses
  - 2. CATA
    - a. Buses

II Transportation Network Issues

- A. Highways
- B. Transit
  - 1. Transit Alternatives for the North Shore
  - 2. North Shore Bus Improvement Study

III Transportation Improvement Priorities

Appendices

Addendum - Local Letters Supporting the North Shore Priorities

Preface

This paper represents the identification of key transportation issues in the North Shore. The paper is intentionally focused on corridors to illustrate that traffic circulation problems do not recognize municipal boundaries.

This paper does not address the solutions to the transportation problems. Rather, the paper is designed to develop priorities for solving the regions transportation problems. Future work of the North Shore Transportation Task Force will be developed to address solution to the priority projects.

This report attempts to be all inclusive - however, it addresses a dynamic system. The reader is invited to contact Dan Fortier at MAPC to point out problems or issues which are not included in this report. All issues identified will be catalogued and provided to the North Shore Transportation Task Force for consideration when the Task Force revises its priorities.

Executive Summary

The North Shore Transportation Task Force was formed in July 1987 to provide a mechanism for locally elected officials to come to agreement on the key transportation issues of the North Shore. The Task Force is an offshoot of Senator Fred Berry's Route 128 Task Force.

The North Shore Transportation Task Force has set out to identify the prioritized needs for the North Shore. The Task Force has agreed that of 139 identified transportation deficiencies, the following transportation improvement projects and locations in the North Shore have the highest priority based upon safety, regional service, delay and traffic volume:

A. TOP REGIONAL PROJECTS (for all funding categories)

1. Route 1 Jughandle, Peabody[1]
2. Beverly Salem Bridge and Bypass Road, Beverly and Salem[1]
3. Route 128/Trask Lane Interchange, Danvers and Beverly[1]
4. Route 114 South of Route 128 through Riley Plaza, Peabody and Salem
4. Lowell Street/Route 1 Interchange, Peabody[1]
4. Route 128 from Forest Street to Brimball Avenue, Peabody, Danvers and Beverly
7. Route 128 at Eastern and Bass Avenues, Gloucester
7. Route 128/Endicott Street Interchange, Danvers
9. Danvers Road R.R. Bridge, Swampscott[1]
9. High Street Reconstruction, Danvers[1]

B. BRIDGE REPLACEMENT (for bridge replacement funding)

1. Beverly Salem Bridge, Beverly and Salem[1]
2. Congress Street Bridge, Salem[1]
3. Danvers Road R.R. Bridge, Swampscott[1]
3. Andover Street R.R. Bridge, Peabody
5. Essex Street R.R. Bridge, Swampscott[1]
6. Legg's Hill Road Bridge, Salem
7. Ocean Avenue R.R. Bridge, Salem

C. FEDERAL AID PRIMARY (primary state system, statewide competition for funds)

1. Route 1 Jughandle, Peabody[1]
1. Beverly Salem Bridge Bypass Road, Beverly and Salem[1]
3. Route 128/Trask Lane Interchange, Danvers and Beverly[1]

---

[1] Projects currently included in the Transportation Improvement Program for the Boston Metropolitan Planning Organization.

4. [2]Route 114 South of Route 128 through Riley Plaza, Peabody and Salem[1]

4. Lowell Street/Route 1 Interchange, Peabody[1]
4. Route 128 Improvements from Forest Street to Brimball Avenue, Peabody, Danvers and Beverly
7. Route 128/Endicott Street Interchange, Danvers
8. Route 128/Lowell Street Interchange, Peabody[1]
9. Route 128/Sohier Road Northbound Ramps, Beverly[1]
10. Route 114 and Sylvan Street intersection, Peabody

D. FEDERAL AID URBAN SYSTEMS (Important community road system, Metropolitan Boston competition for funds)

1. Riley Plaza, Salem[1]
1. Route 128 at Eastern and Bass Avenues, Gloucester
3. High Street Reconstruction, Danvers
4. Cabot Street and Conant Street intersection, Beverly
5. Cabot Street at Rantoul, Front and Water Streets, Beverly[1]
5. Lowell Street and Russell/Goodale Street intersection, Peabody
7. Loring Street, Jefferson Street and Canal Street intersections - Salem
8. Brimball Avenue and Dunham Road intersection, Beverly
8. Route 114 and Route 62 intersection, Middleton[1]
8. Highland Avenue and Swampscott Road, Salem
8. Route 114 and River Street Middleton

The Task Force has also agreed that the following issues are of major importance.

Route 128

The North Shore Transportation Task Force supports plans to increase capacity and safety on Route 128 which can be made without acquiring a large amount of private property.

Route 1

The North Shore Transportation Task Force supports plans to increase capacity and safety on Route 1 with improved ramp systems, lighting of ramps and roadways, upgrading of the acceleration and deceleration lanes and provision of service roads at many locations.

---

[2] Riley Plaza portion is an Urban System Project.

Route 1A

The North Shore Transportation Task Force supports the designation of a full-time project manager for the $70 million Beverly/Salem Bridge and Bridge Street Bypass project.

Route 114

The North Shore Transportation Task Force supports plans for the improvement of the Andover Street Railroad Bridge in Peabody, additional roadway widening, median barriers as necessary, jughandle turn-arounds where required, and service roads to accommodate existing and future Route 114 traffic.

Transit

The North Shore Transportation Task Force supports the creation of a transit system designed to service people wishing to travel within the North Shore. This service should connect North Shore residential, commercial and employment areas.

I Transportation Network Description

A. Highways

The North Shore Transportation Task Force consists of 15 communities located in the northeast portion of the Metropolitan Area Planning Council (Map 1). Access to the area is provided by Interstate 95 and Routes 1 and 128. Secondary accessways within the sub area include Routes 1A, 22, 35, 62, 97, 107, 114, 127, 129 and 133.

Interstate 95 in the North Shore is an eight lane (four northbound and four southbound) facility providing access between north shore communities and New Hampshire and Maine. South of the sub area I-95 joins Route 128 as a suburban beltway that circles the Boston metropolitan area.

Route 128 is a limited access primary arterial in the North Shore. The highway consists of four lanes with a center median. Route 128 serves as the major east-west highway in the coastal portion of the sub area.

Route 1 is a north-south arterial. The southern portion of Route 1 is a four lane divided highway with some access control. The northern portion of Route 1 is a two-lane rural highway.

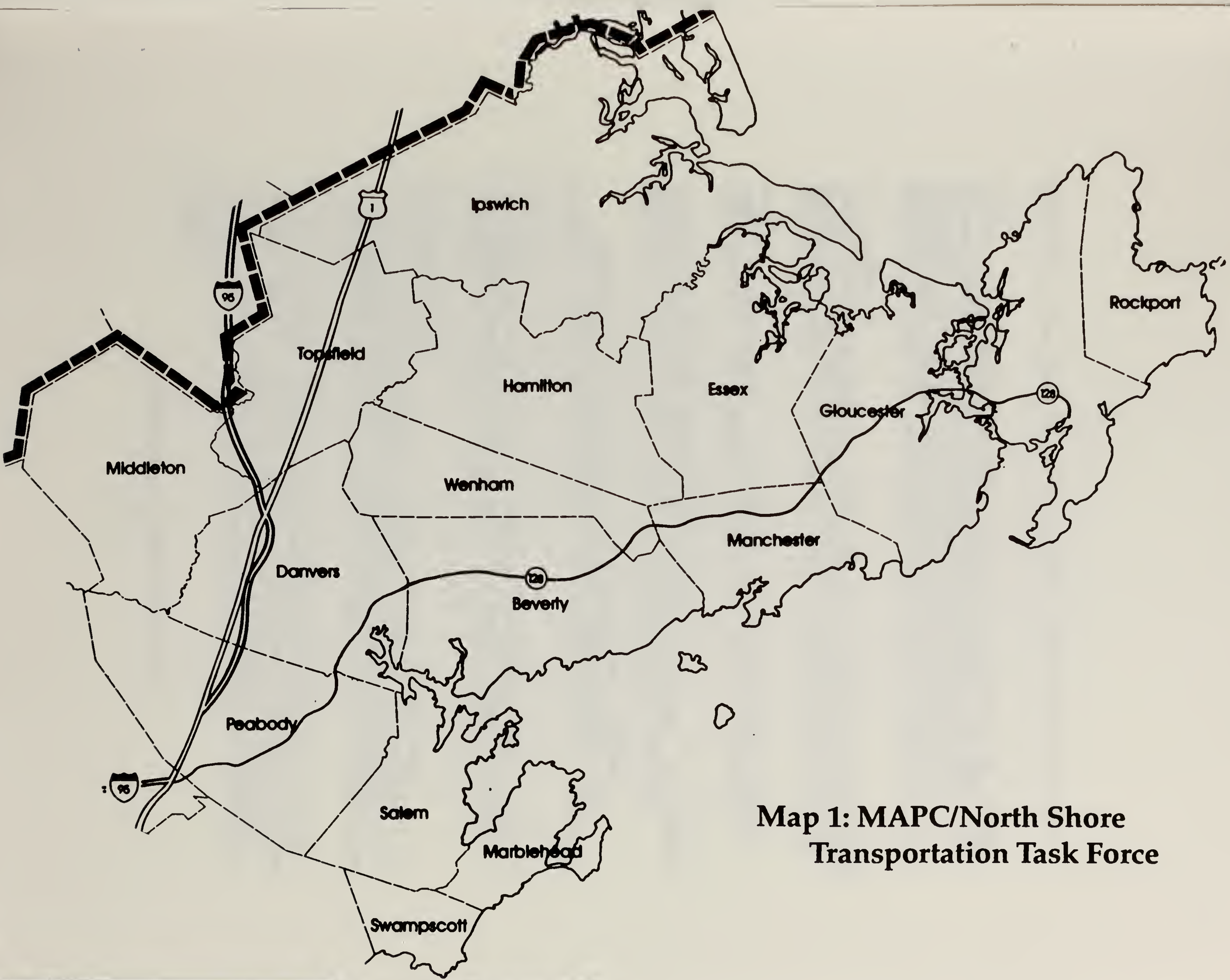
Route 1A is a north-south roadway providing access to community centers in Salem, Beverly, Wenham, Hamilton and Ipswich. The roadway consists of two lanes with no access control.

Route 22 serves a northeast to southwest corridor linking Beverly center to Essex center. This highway is a two lane general access road.

Route 62 is generally an east-west highway connecting the centers of Beverly, Danvers and Middleton. Route 62 is a two lane general access roadway with interchanges at Routes 128 and 1 as well as at Interstate 95 in Danvers.

Route 35 is a two-lane roadway which runs northerly from Route 114 in Peabody through Danvers center before connecting with Route 97 in Topsfield. The roadway serves predominantly residential areas. In Danvers Center, Route 35 serves as the Main Street in the CBD. Route 35 has an interchange with Route 128 in Danvers north of the Peabody line.

Route 97 is a two lane north-south highway which connects Beverly,



Map 1: MAPC/North Shore Transportation Task Force

Wenham and Topsfield to the Lawrence-Haverhill area. Route 97 intersects with Route 1 in Topsfield and provides access to I-95 in Boxford.

Route 107 is a four lane urban arterial with a median along Highland Avenue. It also includes two lane segments along Bridge Street, Boston Street and Essex Street. This highway connects Salem with the City of Lynn.

Route 114 is an east-west highway across the southern portion of the sub area. Route 114 connects Marblehead, Salem, Peabody, Danvers, and Middleton and provides access to the Lawrence-Haverhill area. Route 114 is generally a two lane facility except for an improved portion in Danvers, five lanes, and Peabody, four lanes. Route 114 has an interchange with Route 128 in Peabody and with Route 1 and I-95 in Danvers.

Route 127 is a coastal highway that connects Beverly with Rockport. This two lane facility travels in a generally east-west direction through Manchester and Gloucester.

Route 129 is a two-lane highway into Marblehead and Swampscott from Lynn. Route 129 serves as access to Route 1 and 128 for these communities.

Route 133 is the primary east-west facility for the northern portion of the sub area. Route 133 traverses the centers of Gloucester, Essex and Ipswich. Routes 133 has an interchange with Route 128 in Gloucester and with I-95 in Rowley.

Boston Street (Salem), Main Street and Lowell Street (Peabody) is an east-west corridor that parallels Route 114. The roadway connects Salem and Peabody Centers to Routes 128 and 1 in Peabody. The corridor also provides access to Lynnfield and North Reading.

Ipswich Street (Topsfield) and Topsfield Road (Ipswich) links the centers of Ipswich and Topsfield.

Ipswich stands out as containing a truly radial road network. The Topsfield Road - Ipswich Street corridor is one of the radial accesses to Ipswich. The corridor intersects with Route 1 in Topsfield.

School Street (Manchester) and Southern Avenue (Essex) which link the center of Manchester and Route 127 to Route 133. The two lane roadway provides an interchange to Route 128.

B. Transit

The North Shore receives transit service from the Massachusetts Bay Transportation Authority (MBTA) and the Cape Ann Transportation Authority (CATA).

1. MBTA

The MBTA provides bus services to the cities of Salem, and Beverly and to the towns of Danvers, Marblehead and Swampscott. Several transit routes use Peabody roads, but the City of Peabody receives no service from the MBTA.

The MBTA provides commuter rail service to the North Shore. Rail service is provided along the Ipswich and Rockport branch lines. Rail stations are located in Rockport, Gloucester, Manchester, Beverly and Salem on the Rockport branch and in Ipswich, Beverly, Salem and at the Hamilton-Wenham town line on the Maine line.

a. Buses

Route 441 Marblehead - Boston Marblehead and Swampscott leaves with eight morning and eleven afternoon trips. The route stops in Central Square in Lynn before continuing to Haymarket Square. Route 441 provides six morning and eight afternoon return trips from Boston to Marblehead. Three additional morning trips are made from Lynn to Swampscott and Marblehead.

Route 442 Marblehead - Boston also serves Swampscott. This route provides thirteen morning and ten afternoon/evening trips to Boston via Central Square in Lynn plus six trips from Marblehead to Lynn. Route 442 also provides six morning and sixteen afternoon/evening return trips from Boston to Marblehead plus two afternoon return trips to Swampscott.

Route 450 Salem - Boston provides bus service between downtown Salem and Haymarket Square, Boston. The route provides twenty-one trips from Salem to Boston every morning and ten afternoon trips. The route provides seven morning and twenty-one afternoon/evening return trips.

Route 451 North Beverly - Salem provides inter-city transit service to Salem and Beverly. The route links the two downtowns with thirteen round trips daily.

Route 455 Salem - Boston also provides bus service between Salem and

Haymarket Square. Route 455 is a handicap service with a wheelchair lift and tie-downs. This route provides 31 inbound and 32 outbound trips daily.

Route 458-468 Salem Center - Danvers provides access between Salem and the Peabody - Danvers commercial areas. This route traverses the City of Peabody but provides no true service to the City as it does not pick-up or discharge passengers in Peabody. The route also provides service to the Danvers Hospital and the Essex Agricultural School.

2. CATA

CATA provides fixed route bus service to Gloucester and Rockport. Special elderly services are also available in Gloucester, Hamilton, Wenham, Rockport and Ipswich.

a. Buses

Gloucester to Rockport via Eastern Avenue provides outbound service between Gloucester and Rockport with 12 trips daily to Bearskin Neck in Rockport.

Rockport to Gloucester via Eastern Avenue provides the return trip from Bearskin Neck in Rockport to Gloucester 10 times daily. In Rockport these two routes match up with Lanesville CATA route. Two of these trips connect with the MBTA commuter rail in Gloucester.

Gloucester to Rockport via Lanesville provides 16 trips daily from Gloucester to Bearskin Neck. This route provides 11 connections in Gloucester and five connections in Rockport to MBTA commuter rail.

Rockport to Gloucester via Lanesville provides 18 return trips from Rockport to Gloucester. The route provides 10 connections to commuter rail in Rockport and five connections to commuter rail in Gloucester.

Gloucester to Niles Beach/Rocky Neck provides 18 trips daily to the shopping areas and beaches on Rocky Neck.

Niles Beach/Rocky Neck to Gloucester provides 16 return trips daily from the shopping areas and beaches on Rocky Neck.

Gloucester to Magnolia provides 10 trips daily from Central Gloucester to the Magnolia section of the city.

Magnolia to Gloucester provides 13 return trips daily from Magnolia to Gloucester. Some of these routes provide service to the Essex town line.

Gloucester to West Gloucester/Essex Line provides eleven outbound trips daily. Three of these trips provide service along Route 128.

West Gloucester/Essex Town Line to Gloucester provides 12 return trips daily including two trips along Route 128. The two West Gloucester routes make connections to commuter rail and to the Magnolia bus routes.

II Transportation Network Issues

A. Highways

The North Shore highway system, similar to that in other areas, is overburdened. A comprehensive approach is needed to solve the existing deficiencies while creating possibilities for future economic expansion in the North Shore.

Interstate 95 in the North Shore is nearing completion. It is anticipated that in the Spring of 1988 interstate traffic will be almost completely removed from the one-mile section of Route 1 in Peabody to a limited access highway located to the east of the present alignment. With the completion of this section and the new I-95/Route 128 interchange, limited access north-south travel will be available in this section of the North Shore (Map 2).

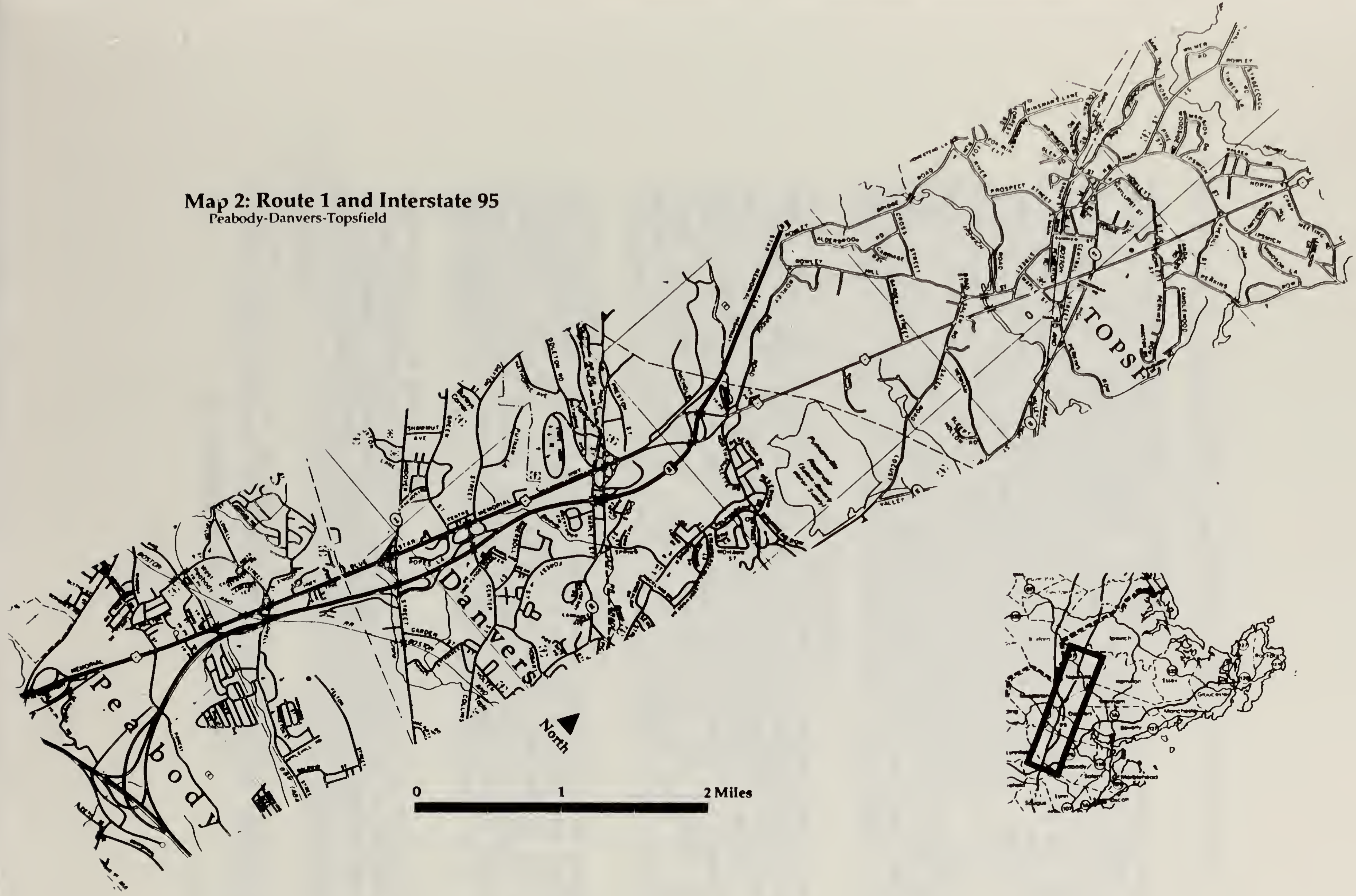
Interstate 95 serves 61,000 vehicles daily (1986) north of Route 1 in Danvers; this is down from 76,550 vehicles daily in 1984, a 2.6% annual decrease in traffic. It is possible that this traffic has diverted to Route 1 to avoid congestion at the Route 1 - Interstate 95 merge. Route 1 traffic north of this merge grew 9.1% (+12,220 vehicles daily) between 1983 and 1987 which corresponds with the loss of 11.0% (-15,850 vehicles daily) of the I-95 traffic between 1984 and 1986. When the I-95/Route 128 interchange is complete this diverted traffic may return to the interstate system.

Route 128 is a part of an early beltway system. The highway has been identified as containing substandard acceleration and deceleration areas at most interchanges in the southern portion of the sub area (Map 3). It is constricted in several locations due to bridges that barely accommodate the existing four lane configuration. The City of Gloucester has identified specific traffic deficiencies at two locations on the northern section of Route 128 (Map 4). Safety and capacity problems are identified at the intersections of Route 128 with Bass Avenue and Eastern Avenue. These intersections are the northeastern terminus of Route 128. The CTPS "Route 128 Corridor Planning Study" identifies 22 accidents at the signalized intersection of Route 128 and Eastern Avenue. Route 128 accommodates 52,000 vehicles daily (1984) at the Danvers-Beverly line and approximately 26,000 vehicles daily (1984) in Gloucester.

The Central Transportation Planning Staff (CTPS) as part of the "Route

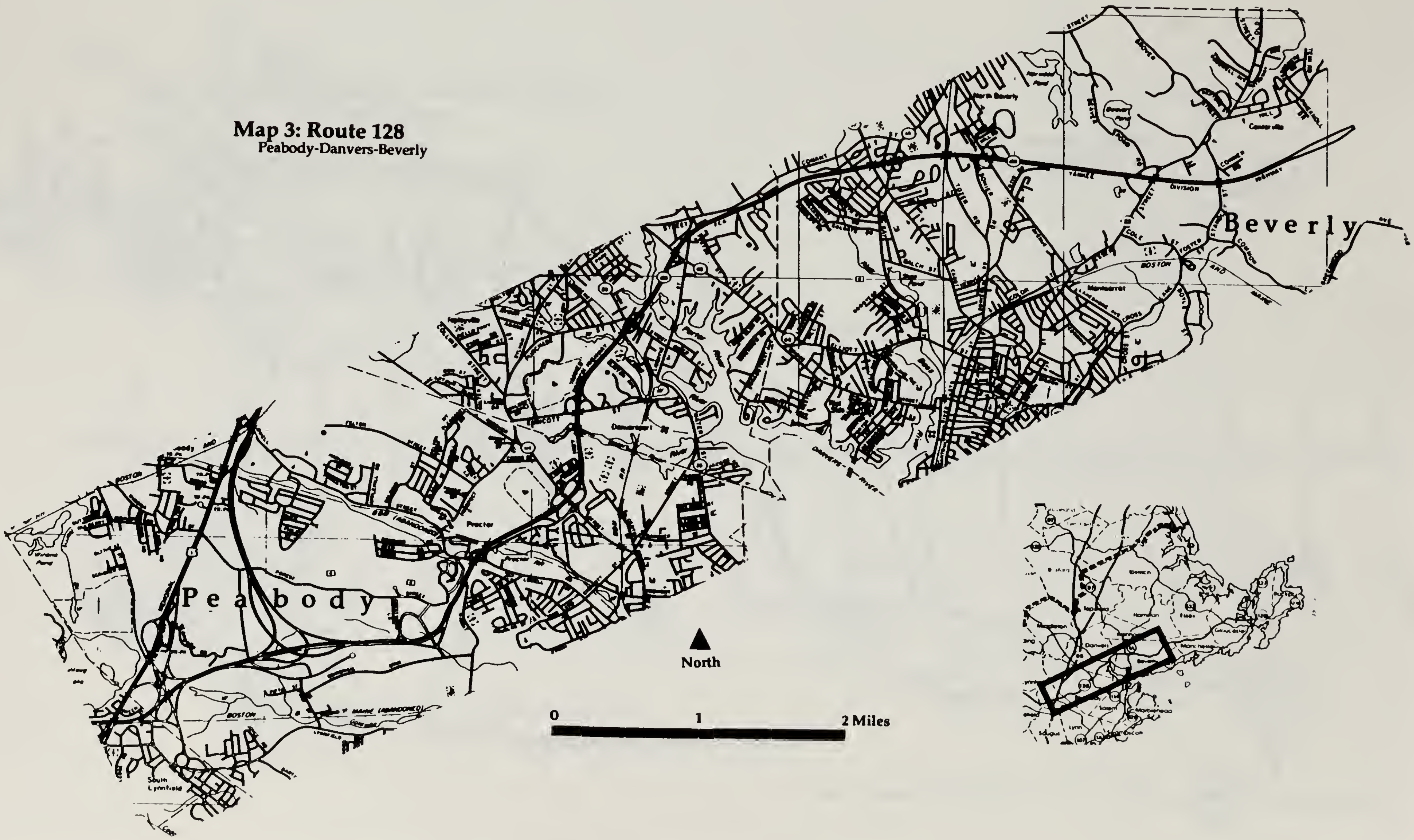
Map 2: Route 1 and Interstate 95

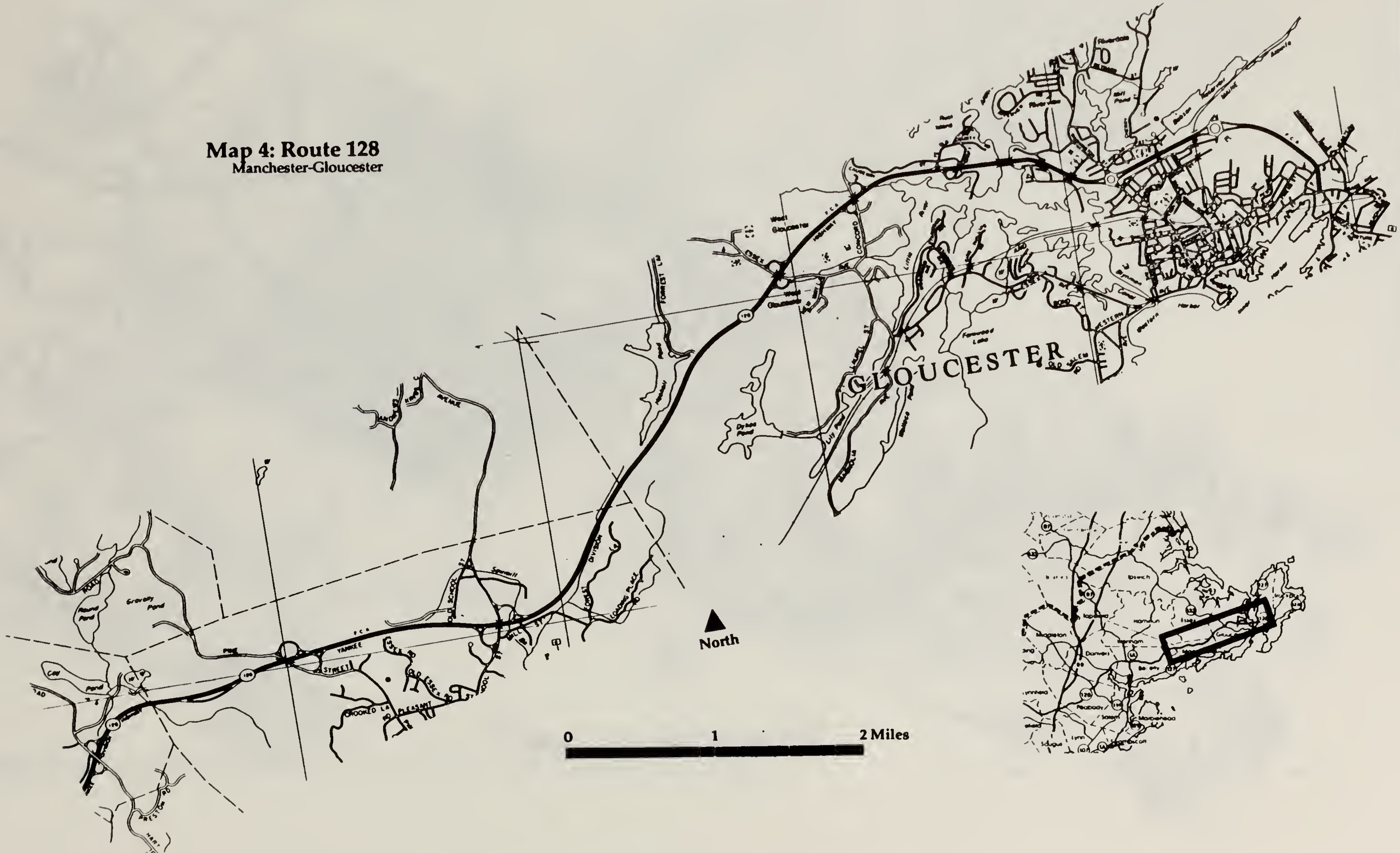
Peabody-Danvers-Topsfield



Map 3: Route 128

Peabody-Danvers-Beverly

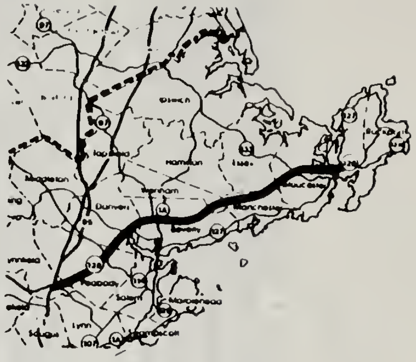


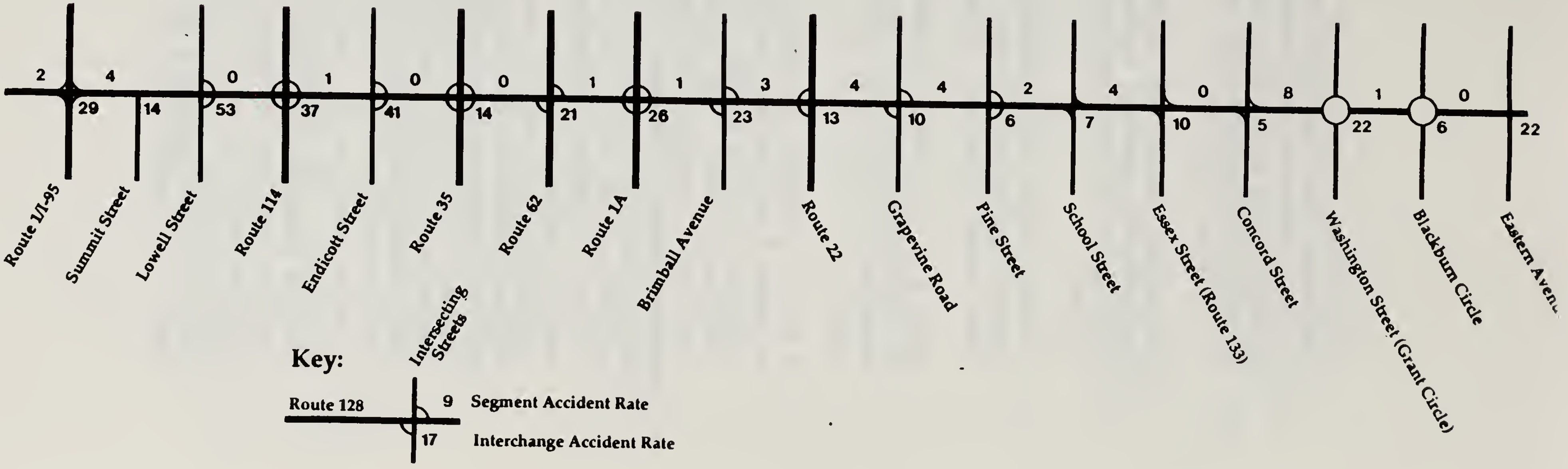


Map 4: Route 128
Manchester-Gloucester

Map 5: Route 128 Average Annual Accidents

1975-80 and 1983





Source: *"Progress Report for Route 128 Corridor Planning Study"*, CTPS, September 1987.

128 Corridor Planning Study" has collected traffic accident statistics for Route 128 in the North Shore. This data is exhibited in Map 5. The data indicates that traffic using the interchange areas are more susceptible to accident occurrence than are the highway segments. Motorists using the Lowell Street, Endicott Street and Route 114 interchanges experience the most severe safety problems.

The northern portion of Route 128 consists of several scenic vistas in North Beverly, Wenham, Manchester and Gloucester. These areas have been subject to the possible "greenbelt" through the MDPW Open Space Program.

The North Shore Transportation Task Force supports plans to increase capacity and safety on Route 128 which can be made without acquiring a large amount of private property.

Route 1 is a highway with a split personality. From the interchange of I-95 and Route 1 near the Topsfield-Danvers line to the Peabody-Lynnfield line, Route 1 consists of four lanes with a median (Map 2).

A one-mile segment of Route 1 in this area, in Peabody, serves jointly as Route 1 and Interstate 95. This section of Route 1 is heavily congested serving 69,988 vehicles daily in 1987, down from 72,200 vehicles in 1984, 1.0% annual loss over three years. It is anticipated that when the new Interstate 95 - Route 128 interchange is opened as many as 40,000 vehicles daily will be removed from this section of Route 1.

In 1984 a combined 105,685 vehicles were counted on Routes 1 and I-95 north of the merge. South of the merge only 72,200 vehicles were counted, a loss of 31.7% of the traffic (33,485 vehicles in 1984). While a portion of this loss in traffic may be destined for points in Peabody or Middleton, a sizable number of vehicles may be seeking alternate routes to avoid congestion in the merge area. Impacted streets may include Lowell and Forest Streets east of Route 1, and Pine, Winona, and Lowell Streets west of Route 1.

A second issue on this portion of Route 1 is the "jughandle" turnaround. The jughandle allows an opportunity for northbound traffic to reverse its direction on Route 1, approximately 4,000 vehicles used the jughandle daily in 1987. The jughandle operates with the use of a traffic signal which stops north and southbound traffic on Route 1. In order to reduce congestion MDPW has proposed relocating the jughandle to the north of the merge of Route 1 and I-95.

Route 1 through Topsfield and Ipswich is a rural two lane highway. Traffic on this stretch of highway was 9,690 vehicles per day at the Ipswich-Topsfield town line in 1984 and 10,200 in 1987 (+1.7% per year), and 10,091 vehicles per day in 1987 at the Ipswich-Rowley town line.

Route 1 suffers from strip development. Little access control and frequent curb-cuts aggravate problems due to heavy vehicular volumes. Development and redevelopment pressures in the corridor threaten to further deteriorate the operation of Route 1.

Specific congestion points on Route 1 include: [3]

LOS E Route 114 interchange, Danvers;
140 accidents from 1982 through 1984
 at Lowell Street interchange, Peabody;
LOS F in 1993 at Interstate 95
 interchange at the Danvers - Topsfield
 town line;
LOS E at Route 62 interchange, Danvers;
LOS D in Ipswich from Rowley
 town line to Topsfield
 town line;
LOS E at Linebrook Road, Ipswich.

The North Shore Transportation Task Force supports plans to increase capacity and safety on Route 1 with improved ramp systems, lighting of ramps and roadways, upgrading of the acceleration and deceleration lanes and provision of service roads at many locations.

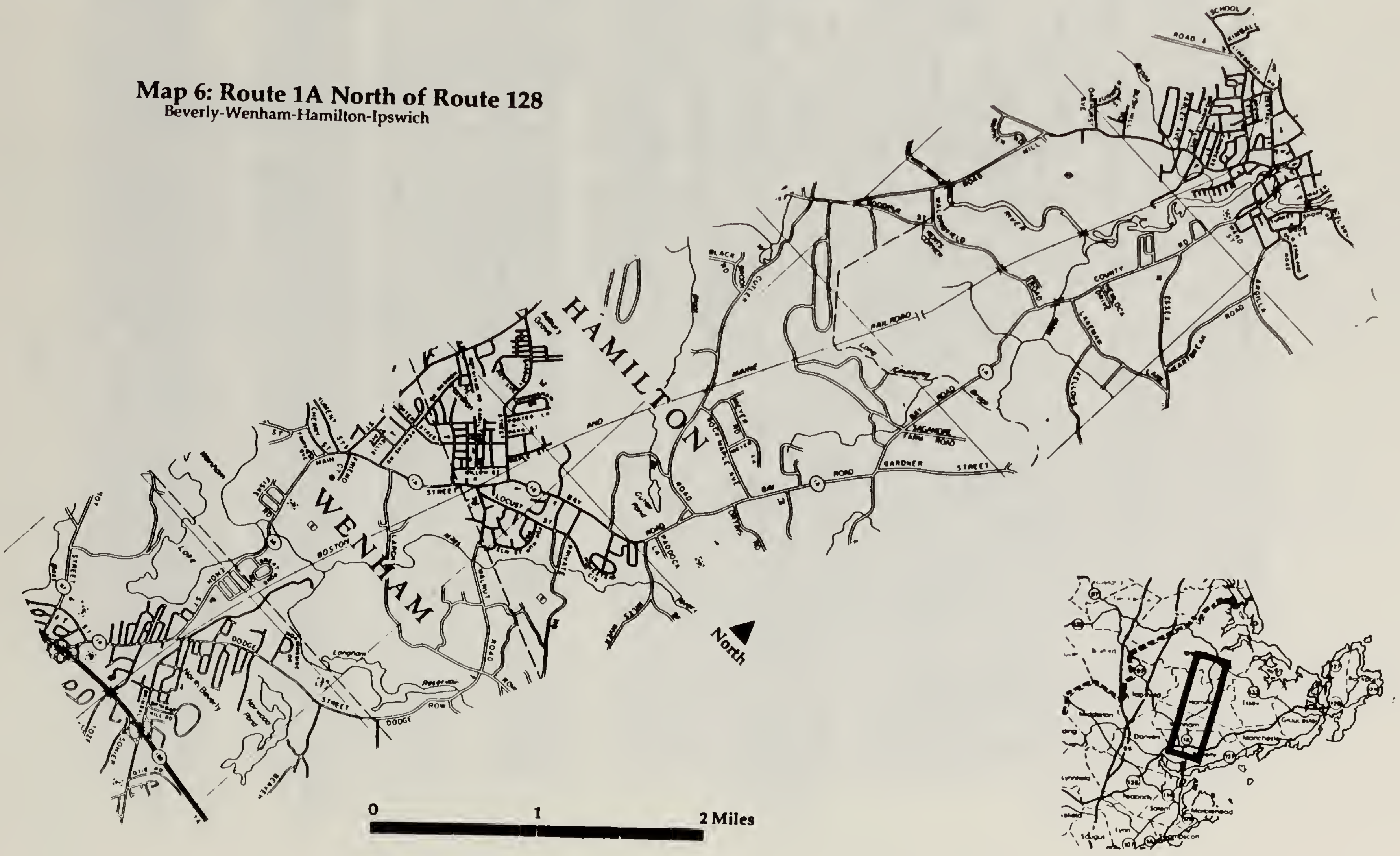
Route 1A as a regional collector roadway suffers from traversing several community centers and commercial districts (Map 6 and 7). Route 1A experiences congestion problems due to frequent left-turn maneuvers into and out of commercial driveways and side streets. Route 1A is used by approximately 29,000 vehicles daily (1982) in Beverly, 6,200 vehicles daily (1984) in Hamilton 12,450 vehicles daily (1984) in Ipswich Center, and 12,863 vehicles per day (1987) at the Ipswich-Rowley town line.

The Salem - Beverly Bridge and Bridge Street in Salem are key

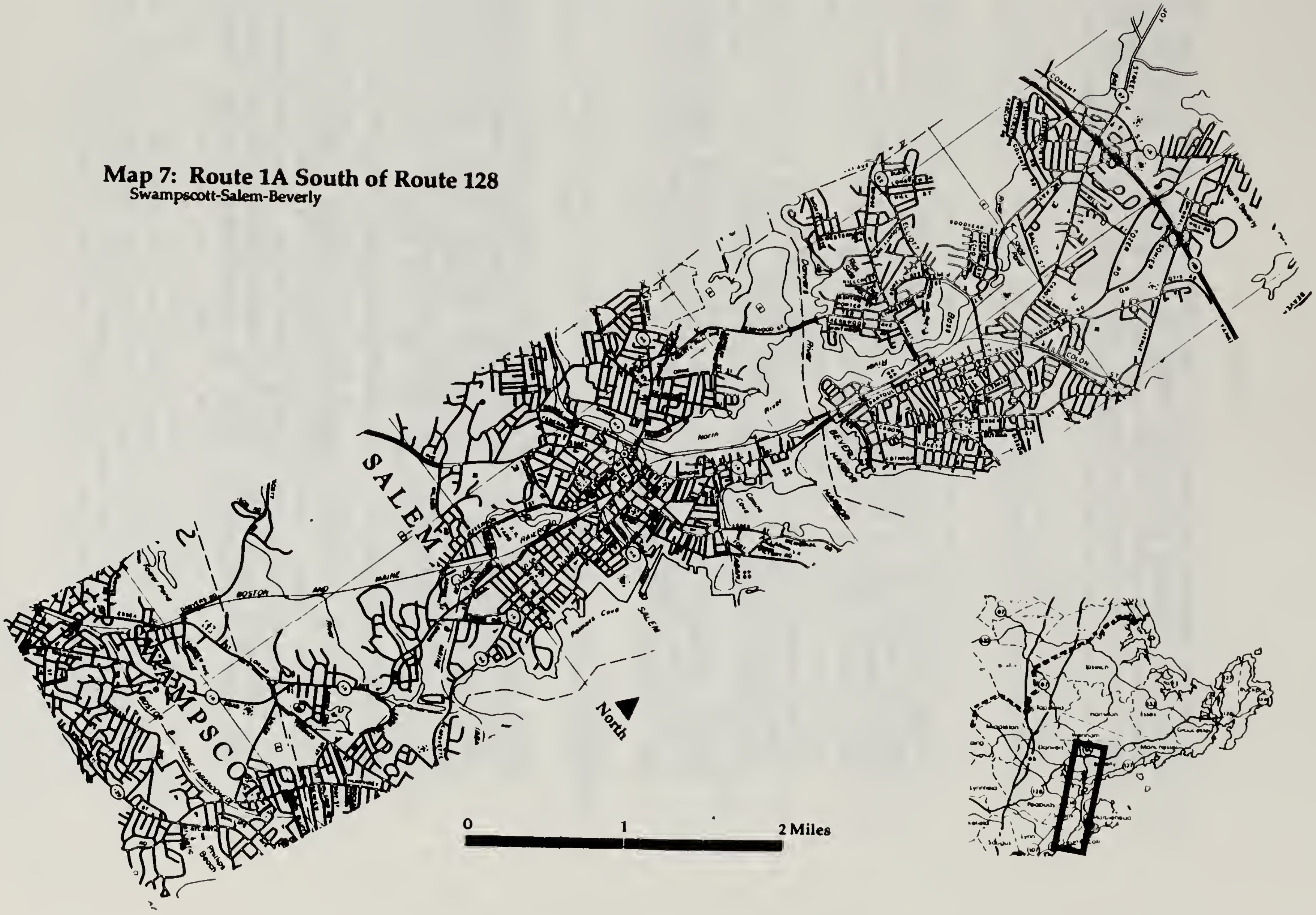
---

[3] See Appendix A for more information related to Route 1.

Map 6: Route 1A North of Route 128
Beverly-Wenham-Hamilton-Ipswich



Map 7: Route 1A South of Route 128
Swampscott-Salem-Beverly



congestion points on Route 1A. The existing bridge must open to allow passage of boaters under the bridge inconveniencing motorists and adding to congestion. Replacement of the Beverly - Salem Bridge and construction of a Bridge Street by-pass road have been often discussed yet has been unable to advance through the Transportation Improvement Program process.

Specific congestion points include: [4]

Bridge Street (1A) at Washington Street, Salem
Dodge Street (1A) at Cabot Street, Beverly
Dodge Street (1A) at Enon Street, Beverly
Derby Street (1A) at Congress Street, Salem
Loring Avenue (1A) at Paradise Road, Salem
Loring Avenue (1A) at Jefferson Street, Salem
Loring Avenue (1A) at Canal Street, Salem
South Main Street (1A) at Market Street, Ipswich

The North Shore Transportation Task Force supports the designation of a full-time project manager for the $70 million Beverly/Salem Bridge and Bridge Street Bypass project.

Route 22
No information to date.

Route 35 is a heavily travelled corridor between Peabody and Danvers with 19,500 vehicles per day in 1986. Congestion occurs at the southerly termination of Route 35 in Peabody at its intersection with Route 114. In Danvers center Route 35 experiences severe congestion at its intersection with Elm Street and Conant Street. Route 35 in this area carried 13,450 vehicles daily in 1985. Traffic growth on Route 35 in Danvers was 1.8% annually between 1982 and 1985.

Route 62 is a collector roadway passing through predominantly residential areas. Route 62 skirts the Beverly and Danvers centers but passes directly through Middleton Center. The interchange area of Route 62 with Route 128 is heavily congested (23,750 vehicles daily in 1982) during peak periods as is the interchange of Route 62 with I-95.

---

[4] See Appendix B for more information related to Route 1A.

While Route 62 can be characterized as having numerous curb cuts, they are generally residential and have not yet threatened the viability of this road as a regional collector. Approximately 21,000 vehicles used Route 62 daily in Beverly in 1982, and 9,250 vehicles used the road daily in 1984 at the Danvers-Middleton line.

In Middleton the intersections of Route 62 and Route 114 (Boston Street)/So. Main Street and Maple Street/So. Main Street) have both been identified as operating with extreme delays.

Route 97 is a collector road that is rather narrow and circuitous. The roadway traverses residential and agricultural/forest areas between Beverly and the Topsfield town center. In 1981, 800 vehicles daily used Route 97 in Topsfield and in 1982 6,400 vehicles daily used it in Beverly. West of Topsfield Route 97 provides access to I-95 in Boxford.

Route 107 along Highland Avenue serves as the only four lane arterial in Salem. The roadway experiences some traffic delays during peak periods. The sections of Route 107 that are located on Bridge Street, Boston Street and Essex Street experience more significant traffic problems due to their location in an urban center and the presence of only two lanes. Highland Avenue served 11,000 vehicles per day northbound and 11,300 vehicles per day southbound in 1983.

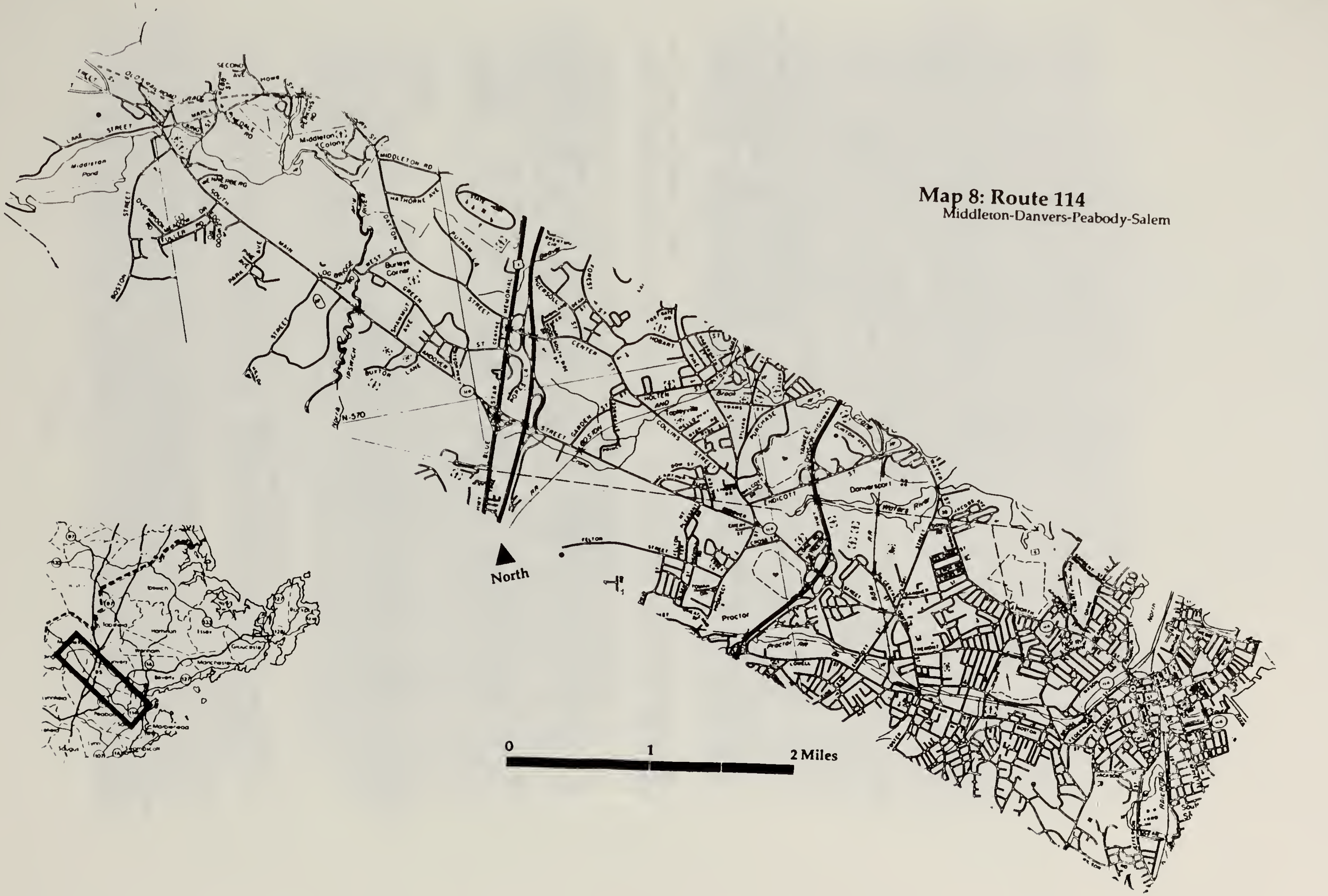
Traffic delays occur along Route 107 at Swampscott Road, Essex Street and Marlborough Road.

Route 114, as described above, serves as the primary access to the southern portion of the sub-area. Marblehead, Salem and Peabody traffic must choose between using Route 114 or Lowell Street in Peabody to access Route 128. Route 114 is characterized as a circuitous arterial traversing both residential and commercial areas.

Heavy congestion is experienced on Route 114 throughout Marblehead, Salem, Peabody and Middleton (Map 8). A portion of Route 114 has been recently improved in Danvers and Peabody.

Route 114 serves 42,400 vehicles per day (1986) in Salem (above Bridge Street), 35,6000 vehicles per day (1986) in Peabody (east of Prospect Street), 30,300 vehicles per day (1985) in Danvers (east of I-95) and 22,400 vehicles per day (1984) in Middleton (west of Route 62). Traffic on Route 114 in Peabody increased 5.8% annually between 1981 and 1986 at the Danvers town line (west of Prospect Street in Peabody) and by 2.9% between 1984 and 1986 between Prospect Street and the Route 114/Route 128 interchange. The Merrimack Valley Planning

Map 8: Route 114
Middleton-Danvers-Peabody-Salem



Commission, in the Route 114 Traffic Study (May 1985), cited a background through-traffic growth rate of 2.3% on Route 114 in North Andover.

As mentioned, numerous problems have been identified for Route 114. The most serious problems are capacity constraints in Salem and Peabody where traffic volumes can justify four lanes for traffic in an area where only two lanes are available. These constraints, such as on North Street in Salem and on Andover Street in Peabody, have increased traffic flow on streets such as Tremont Street (12,000 vehicles in 1986) and Highland Avenue in Peabody and Oakland Street in Salem.

Specific congestion points include:[5]

LOS F at Boston Street (Route 62), Middleton;
LOS D at Maple Street (Route 62), Middleton;
LOS E at Route 1 interchange, Danvers;
LOS E from Boston Street (Middleton) to Sylvan Street (Peabody);
LOS F at Interstate 95 interchange in 1993, Danvers;

LOS F at Sylvan Street with 276 seconds delay per vehicle and 97 accidents from 1982 through 1984, Peabody;
LOS E at River Street, Middleton;
LOS F at Margin Street and Gardner Street, Peabody;
LOS F at Pulaski and Gardner Street, Peabody;
LOS F at Pulaski and Central Streets with 112 total accidents in 1979, 80 and 1983, Peabody; and
LOS F at Federal Street, Salem.

The North Shore Transportation Task Force supports plans for the improvement of the Andover Street Railroad Bridge in Peabody, additional road widening, median barriers as necessary, jughandle turn-arounds where required, and service roads to accommodate existing and future Route 114 traffic.

---

[5] See Appendix H.

Route 127, the coastal highway, follows what could be considered a somewhat dangerous route. The roadway contains a narrow, circuitous paved surface which comes frighteningly close to many retaining walls. The speed limit is restricted to 25 or 30 miles per hour in many locations. Traffic volumes recorded in 1984 for Route 127 was 3,120 vehicles per day at the Manchester - Gloucester line, and in 1987 8,600 vehicles per day in Beverly.

Route 129
No information to date.

Route 133 serves as the primary east-west arterial across the northern portion of the sub area. The roadway provides several scenic vistas and passes through the town centers of Essex and Ipswich; as such the roadway experiences seasonal traffic flow problems due to sightseers and tourists. Sections of Route 133 may be excellent candidates for Open Space protection through the MDPW Open Space program.

Portions of Route 133 are developed to cater to this seasonal traffic, these locations are typified by the lack of access control and congestion due to left turning traffic. The only available traffic volume for Route 133 are in Ipswich center and at the Ipswich-Rowley town line where the road follows the same route as Route 1A. In Ipswich center 12,450 vehicles per day (1984) and at the Ipswich-Rowley town line 12,863 vehicles per day (1987) were counted.

Boston Street (Salem), Main Street and Lowell Street (Peabody) experience severe congestion problems. In 1986 Main Street, Peabody, carried 28,700 vehicles daily at the Salem city line, Lowell Street carried 28,400 vehicles daily east of Peabody Square, 31,700 vehicles daily near North Shore Road and Route 128, and 24,3000 vehicles daily at Route 1.

The increase in traffic for Lowell Street has been substantial. Between 1981 and 1986 traffic on Lowell Street at Route 1 grew by 7.8% annually. For the same time frame traffic on Lowell Street at Route 128 grew by 39.0% annually, increasing from 6,103 ADT in 1981 to 31,700 ADT in 1986. A portion of this latter growth may be attributed to the opening of the North Shore Shopping Center and the other adjacent commercial development.

Traffic deficiencies are rampant in this corridor. Peabody and Salem traffic studies and available environmental impact reports for Peabody and Salem have identified the following deficiencies for Lowell St.:

- high volumes;

LOS F at Russell Street, Peabody;
LOS E at Goodale Street, Peabody;
LOS F at Ramps with Route 1
 and 44.3 accidents per year, Peabody;
general traffic congestion at Prospect Street;
LOS F at Route 128 Ramps, Peabody;
 and 45.7 accidents per year, Peabody;
LOS F at Forest Street, Peabody;
LOS F at Endicott Street, Peabody;
LOS F - Washington Street, Peabody;
Boston Street - Heavy Traffic, Salem; and
LOS F - Bridge Street, Salem.

Ipswich Street (Topsfield) and Topsfield Road (Ipswich)
No information to date.

School Street (Manchester) and Southern Avenue (Essex)
No information to date.

B. Transit

The key transit issues in the North Shore is the ability for people to use public transportation to travel within the North Shore. The present transit systems serving the North Shore, the MBTA, and CATA, provide for overlapping service only at commuter rail stations in Rockport and Gloucester. Transit routes in the North Shore are predominantly established as radial routes to and from Boston. No routes provide service within the north shore connecting north shore residential, commercial and employment areas.

A great deal of attention has been focussed on North Shore transit issues including studies in:

> 1981 by the Kennedy School of Government entitled Transit Alternatives for the North Shore Communities; and 1983 by the North Shore Economic Council entitled North Shore Bus Improvement Study.

1. Transit Alternatives for the North Shore
John F. Kennedy School of Government, Cambridge, MA 1981.

In 1981 Harvard University's City and Regional Planning Program and The Harvard Business School conducted the North Shore Transit Workshop. The client group for this study was the North Shore Transit Caucus consisting of representatives of Beverly, Danvers, Hamilton, Lynn, Lynnfield, Manchester, Marblehead, Middleton, Nahant, Peabody, Salem, Swampscott, Saugus, Topsfield, Wenham, Gloucester, Rockport and Ipswich.

The study addresses transit issues in non-North Shore Transportation Task Force communities as well as within the subregion. The Town of Essex, a member of the NSTTF, was not included in the study.

The workshop set out to describe the transit needs of the North Shore, assess the effectiveness of existing service in meeting needs; develop and evaluate the alternative ways to meet the needs in terms of systems, funding and institutional arrangements; and make recommendations for the North Shore.

The Kennedy School evaluated 5 alternatives, identified as 1A, 1B, 2A, 2B and 2C. These alternatives were:

Alternative 1A - existing (1981) MBTA service.

Alternative 1B - MBTA service prior to 1981 service cuts.

Alternative 2A - service for commuting trips to Boston and within the North Shore operating along regional corridors providing service for Lynn, Peabody, Danvers, Beverly, Salem, Swampscott, and Marblehead.

Alternative 2B - expands 2A by providing more routes serving residential areas and direct connections between Salem, Peabody and Danvers.

Alternative 2C - would provide an extensive transit system based upon Alternatives 2A and 2B but adding local routes in Salem, Danvers and Beverly; service between Lynn and Salem through Marblehead; and service from Salem to Danvers and Peabody.

2. North Shore Bus Improvement Study prepared by: North Shore Economic Council, Henderson Planning Group, for Massachusetts Bay Transportation Authority, 1983.

   In 1983 the North Shore Economic Council undertook the above cited study of transit in the North Shore. The goals of the study were:

   1. Improve communications between the MBTA and the North Shore;
   2. Increase direct involvement by North Shore communities in MBTA decision making;
   3. Improve public transit in the North Shore;

4. Increase cost effectiveness of transit in the North Shore;
5. Improve transit marketing;
6. Improve transit facilities; and
7. Strengthen coordination between public and private transit operations.

The study recommends:

1. That the MBTA should monitor service more closely and be more responsive to changing travel demands.
2. Some routes be adjusted in order:
    a. to address waiting time for transfers;
    b. to develop a two-way loop serving Salem, Beverly, Danvers and Peabody;
3. The development of a multi-modal transportation center in Salem;
4. Establishing a North Shore MBTA service coordinator at the Lynn garage;
5. Initiating a program for contracted service for major employers;
6. Exploration of restoring service to Peabody; and
7. Offering some marginal routes on a bid basis to private contractors.

The North Shore Transportation Task Force supports the creation of a transit system designed to service people wishing to travel within the North Shore. This service should connect North Shore residential, commercial and employment areas.

III Transportation Improvement Priorities

The North Shore Transportation Task Force, in identifying the major and secondary accessways, and the key issues related to travel on these roads, found 139 individual transportation deficiencies. Of these deficiencies six were bridge projects, 44 were on the states primary road network, and 89 were part of the urban systems road network.

The Task Force, through an initial survey of the community representatives, was able to reduce the total number of projects to be considered for prioritization to approximately 30.

In determining which projects should be considered more important than other projects, the Task Force decided safety would be the critical issue. The Task Force also decided regional projects were more important than projects with more local impacts and that delay may be more critical than total volume served. Based upon these criteria the North Shore Transportation Task Force has established the following priorities within the subregion:

Table 1
TOP REGIONAL PROJECTS
(for all funding categories)

1. Route 1 Jughandle, Peabody
1. Beverly Salem Bridge and Bypass Road, Beverly and Salem
3. Route 128/Trask Lane Interchange, Danvers and Beverly
4. Route 114 South of Route 128 through Riley Plaza, Peabody and Salem
4. Lowell Street/Route 1 Interchange, Peabody
4. Route 128 from Forest Street to Brimball Avenue, Peabody, Danvers and Beverly
7. Route 128 at Eastern and Bass Avenues, Gloucester
7. Route 128/Endicott Street Interchange, Danvers
9. Danvers Road R.R. Bridge, Swampscott
9. High Street Reconstruction, Danvers

Table 2
BRIDGE REPLACEMENT
(for bridge replacement funding)

1. Beverly Salem Bridge, Beverly and Salem
2. Congress Street Bridge, Salem
3. Danvers Road R.R. Bridge, Swampscott
3. Andover Street R.R. Bridge, Peabody
5. Essex Street R.R. Bridge, Swampscott

6. Legg's Hill Road Bridge, Salem
7. Ocean Avenue R.R. Bridge, Salem

Table 3
FEDERAL AID PRIMARY
(primary state system, statewide competition for funds)

1. Route 1 Jughandle, Peabody
1. Beverly Salem Bridge Bypass Road, Beverly and Salem
3. Route 128/Trask Lane Interchange, Danvers and Beverly
4. Route 114 South of Route 128 through Riley Plaza, Peabody and Salem[6]
4. Lowell Street/Route 1 Interchange, Peabody
4. Route 128 Improvements from Forest Street to Bribmall Avenue, Peabody, Danvers and Beverly
7. Route 128/Endicott Street Interchange, Danvers
8. Route 128/Lowell Street Interchange, Peabody
9. Route 128/Sohier Road Northbound Ramps, Beverly
10. Route 114 and Sylvan Street intersection, Peabody

Table 4
FEDERAL AID URBAN SYSTEMS
(Important community road system, Metropolitan Boston competion for funds)

1. Riley Plaza, Salem
1. Route 128 at Eastern and Bass Avenues, Gloucester
3. High Street Reconstruction, Danvers
4. Cabot Street and Conant Street intersection, Beverly
5. Cabot Street at Rantoul, Front and Water Streets, Beverly
5. Lowell Street and Russell Goodale Street intersection, Peabody
7. Loring Street, Jefferson Street and Canal Street intersections - Salem
8. Brimball Avenue and Dunham Road intersection, Beverly
8. Route 114 and Route 62 intersection, Middleton
8. Highland Avenue and Swampcott Road, Salem
8. Route 114 and River Street Middleton

DF/mlm
North Shore
(North Shore Tra Pla)

---

[6] Riley Plaza portion is eligible for Urban System funding

APPENDIX A

ROUTE 1

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Route 114	114	Route 1	1		0		0	LOS E from WB Route 114 onto Route 1 SB	0	Crane Brook Office Park
Route 1	1		0	Route 95	95	Lowell Street	0	Potential future capacity problems (1993)	1993	Crane Brook Office Park
Route 1	1	Lowell Street	0		0		0	Design of interchange cannot accommodate volume safety 1982-1984 140 accidents	0	Crane Brook Office Park
Route 1	1	Route I-95	95		0		0	1993 LOS F in PM peak hour Route 95 NB to Route 1 NB	1993	Crane Brook Office Park
Lowell Street	0		0	Route 1	1		0	Long Delays on East bound segment, LOS E	0	Crane Brook Office Park
Route 62	62	Route 1	1		0		0	Weave Section on Route 1 from Route 62 westbound operates at LOS E	0	Conifer Hill Executive Office Park
Conifer Hill Drive	0		0	Route 1	1	Route 62	62	Narrow, curves, poor sight distance	0	Conifer Hill Executive Office Park
South Main Street	114		0	Boston Street	62	Route 1	1	v/c ratio of 0.66 to 0.77, 1990 v/c ratio greater than 1.0	1985	Route 114 Plaza, Middleton
Route 1	1		0	Route 1-95	95	Danvers Town LIne	0	Interchange and itersection geometry substandard	1987	City of Peabody Traffic Study
Route 1	1		0	Lynnfield Town Line	0	Route 1-95	95	Interchange and intersection geometry	1987	City of Peabody Traffic Study

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Lowell Street	0	Route 1 Ramps	1		0		0	Sight distance, horizontal and vertical alignment, access control, LOS F, accidents 79, 80 & 83 - 133	1987	City of Peabody Traffic Study
Route 1	1		0	Rowley Town Line	0	Topsfield Town Line	0	Decrease to LOS D in 1989 AM & PM peaks	0	Ipswich Country Club FEIR
Route 1	1	Linebrook Road	0		0		0	Safety (1 fatal accident 1983-85), decrease to LOS E in 1989 for lefts out of Linebrook Road	1989	Ipswich Country Club FEIR

APPENDIX B

ROUTE 1A

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Dodge Street	1 A		0	Henry's Supermarket	0	Enon Street	1 A	Congestion due to heavy left turns	1984	Traffic and Safety Improvements, Beverly MA
Enon Street	1 A		0	Dodge Street	1 A	Wenham Town Line	0	Heavy congestion due to left turns, lack of access control	1984	Traffic and Safety Improvements, Beverly MA
Dodge Street	1 A	Cabot St, County Way, Longmeadow Rd	97		0		0	High volumes, lack of control, driveways, fire station access	1984	Traffic and Safety Improvments, Beverly MA
Dodge Street	1 A	Conant Street	0		0		0	High left turn volumes, long delays	1984	Traffic and Safety Improvements, Beverly MA
Dodge Street	1 A	Enon Street	1 A		0		0	Delay, congestion, Enon St. left turns block traffic	1984	Traffic and Safety Improvements, Beverly MA
Rantoul St.	1 A		0	Lower End	0	Gloucester Crossing	0	Congestion and delay	1984	Traffic and Safety Improvments, Beverly MA
Cabot St	22	Rantoul, Front, Water Sts	1 A		0		0	Lack of control, channelization, heavy peak hour flow, accidents, delays on and off peak	1984	Traffic and Safety Improvements, Beverly MA
Ocean Avenue	0		0	Jefferson Avenue	0	Canal Street	1 A	A need exists for access between Jefferson Avenue and Canal Street to alleviate pressures in the downtown.	1986	Salem Traffic Study
Loring Avenue	1 A	Legg's Hill Road	0		0		0	Sharp curve on Loring Avenue	1986	Salem Traffic Study
Derby Street	1 A	Congress and Hawthorne Streets	1 A		0		0	LOS F in AM and PM, 11.2 accidents/year from 1/1/75 to 12/31/80	1986	Salem Traffic Study

APPENDIX C

ROUTE 22

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Cabot Street	22	School, Stone and Davis Sts	0		0		0	Side Street delay	1984	Traffic and Safety Improvements, Beverly MA
Cabot Street	22	Hale and Federal Streets	0		0		0	Congestion, limited sight distance	1984	Traffic and Safety Improvements, Beverly MA
Cabot Street	22	Dane and West Dane Sts	0		0		0	Congestion and sight distance	1984	Traffic and Safety Improvements, Beverly MA
Cabot Street	22	Elliott Street	62		0		0	Heavy left turns from Cabot to Elliott Street	1984	Traffic and Safety Improvements, Beverly MA
Cabot Street	22	May, Bartlett and Pleasant Streets	0		0		0	limited sight distance, off-set intersection, long delays	1984	Traffic and Safety Improvements, Beverly MA
Cabot St	22	Rantoul, Front, Water Sts	1 A		0		0	Lack of control, channelization, heavy peak hour flow, accidents, delays on and off peak	1984	Traffic and Safety Improvements, Beverly MA

APPENDIX D

ROUTE 62

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Boston Street	62	South Main Street	114		0		0	Delay on Boston Street LOS "F"	0	Fuller Pond Village
Maple Street	62	South Main Street	114		0		0	Delay on Maple Street LOS (D)	0	Fuller Pond Village
Andover Street	114		0	Boston Street (Middleton)	62	Sylvan Street	0	LOS E with a v/c ration of 0.84 in the am and 0.95 in the pm west of Route 1, and a LOS of C east of Route 1	0	Crane Brook Office Park
Boston Street	62	South Main Street	114		0		0	Left turns from Boston Street to South Main Strret operate at an LOS F	0	Crane Brook Office Park
Route 62	62	Route I-95	95		0		0	North bound exit ramp from I-95 to Route 62 operates at an LOS E, the intersection will operate at a LOS of F in 1989	1989	Conifer Hill Executive Office Park
Route 62	62	Route 1	1		0		0	Weave Section on Route 1 from Route 62 westbound operates at LOS E	0	Conifer Hill Executive Office Park
Conifer Hill Drive	0		0	Route 1	1	Route 62	62	Narrow, curves, poor sight distance	0	Conifer Hill Executive Office Park
Route 62	62	Conifer Hill Drive	0		0		0	LOS D during the pm peak hour, location presently only allows right turns on NB Conifer Hill Drive, proposed changes to Conifer Hill Drive will 1require changes at this location	1989	Conifer Hill Executive Office Park

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
South Main Street	114		0	Boston Street	62	Route 1	1	v/c ratio of 0.66 to 0.77, 1990 v/c ratio greater than 1.0	1985	Route 114 Plaza, Middleton
Cabot Street	22	Elliott Street	62		0		0	Heavy left turns from Cabot to Elliott Street	1984	Traffic and Safety Improvements, Beverly MA
Elliott St	62		0	Cabot St	97	Danvers Town Line	0	Sidewalks, curbing, vertical alignment, access control	1984	Traffic and Safety Improvements, Beverly, MA
Elliott St	62	McKay Street	0		0		0	Heavy left turn volume from McKay and Illiott Streets, delay	1984	Traffic and Safety Improvements, Beverly MA
Elliott Street	62	McPherson Drive	0		0		0	Heavy left turn volumes	1984	Traffic and Safety Improvements, Beverly MA
Elliott Street	62	Beckford St	0		0		0	Heavy left turns, access control, curve radii	1984	Traffic and Safety Improvements, Beverly MA
Maple Street	62	South Main Street	114		0		0	Delay, LOS E-F due to volume on Route 114	1985	Route 114 Plaza Middleton MA

APPENDIX E

INTERSTATE 95

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Route 1	1		0	Route 95	95	Lowell Street	0	Potential future capacity probleas (1993)	1993	Crane Brook Office Park
Route 1	1	Route 1-95	95		0		0	1993 LOS F in PM peak hour Route 95 NB to Route 1 NB	1993	Crane Brook Office Park
Andover Street	114	Route 1-95	95		0		0	1993 LOS F Route 95 to Route 114 EB	1993	Crane Brook Office Park
Route 62	62	Route 1-95	95		0		0	North bound exit raap froa I-95 to Route 62 operates at an LOS E, the intersection will operate at a LOS of F in 1989	1989	Conifer Hill Executive Office Park
Route 1	1		0	Route 1-95	95	Danvers Town Line	0	Interchange and itersection geoaetry substandard	1987	City of Peabody Traffic Study
Route 1	1		0	Lynnfield Town Line	0	Route I-95	95	Interchange and intersection geoaetry	1987	City of Peabody Traffic Study

APPENDIX F

ROUTE 97

APPENDIX G

ROUTE 107

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Highland Avenue	107	Swampscott Road	0		0		0	Delay on Swampscott Road, LOS E, safety due to lack of control	1987	Highland Avenue Condominiums
Highland Avenue	107	Marlborough Road	0		0		0	Delay, LOS D	1987	Highland Avenue Condominiums
Swampscott Road	0		0	Highland Avenue	107	Railroad Tracks	0	Narrow poor alignment, unsafe surface	1986	Salem Traffic Study
Highland Avenue	107	Jackson Street	0		0		0	LOS D in AM, E in PM, 6.7 accidensts/year from 1/1/75 to 12/31/80	1986	Salem Traffic Study
Highland Avenue	107	Dalton Street	0		0		0	LOS C in PM peak	0	Salem Traffic Study
Boston Street	107	Essex Street	0		0		0	LOS F in AM and PM, 11.8 accidents/year from 1/1/75 to 12/31/80	1986	Salem Traffic Study
Highland Avenue	107	Willson Street	0		0		0	LOS B in AM and PM, 13.7 accidents/year 1/1/75 to 12/31/80	1986	Salem Traffic Study
Highland Avenue	107	Marlborough Road	0		0		0	LOS C in AM, E in PM, 15 accidents/year 1/175 to 12/31/80	1986	Salem Traffic Study
Federal Street	0		0	Boston Street	107	North Street	114	Congestion, through traffic in residential neighborhood	1986	Salem Traffic Study
Highland Avenue	107	Swampscott Road	0		0		0	LOS of E in AM and F in PM, 12 accidents/year 1/1/75 to 12/31/80	1991	Salem Traffic Study

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Boston Street	0	Bridge Street	107		0		0	LOS of D in PM peak, LOS F in 1991 PM peak	1991	Salem Traffic Study

APPENDIX H

ROUTE 114

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Boston Street	62	South Main Street	114		0		0	Delay on Boston Street LOS "F"	0	Fuller Pond Village
Maple Street	62	South Main Street	114		0		0	Delay on Maple Street LOS (D)	0	Fuller Pond Village
Route 114	114	Route 1	1		0		0	LOS E from WB Route 114 onto Route 1 SB	0	Crane Brook Office Park
Andover Street	114		0	Boston Street (Middleton)	62	Sylvan Street	0	LOS E with a v/c ration of 0.84 in the am and 0.95 in the pm west of Route 1, and a LOS of C east of Route 1	0	Crane Brook Office Park
Boston Street	62	South Main Street	114		0		0	Left turns from Boston Street to South Main Strret operate at an LOS F	0	Crane Brook Office Park
Andover Street	114	Route I-95	95		0		0	1993 LOS F Route 95 to Route 114 EB	1993	Crane Brook Office Park
Andover Street	114	Sylvan Street	0		0		0	LOS F in pm peak with delay of 276 seconds, excessive cycle length, safety 1982-1984 97 accidents	0	Crane Brook Office Park
South Main Street	114	River Street	0		0		0	River Street delays, LOS E	1985	Route 114 Plaza, Middleton
South Main Street	114		0	Boston Street	62	Route 1	1	v/c ratio of 0.66 to 0.77, 1990 v/c ratio greater than 1.0	1985	Route 114 Plaza, Middleton
Route 114	114	Mount Pleasant Street	0		0		0	LOS E, traffic using Mount Pleasant Street to avoid Route 114 congestion	1984	Peabody Danvers Shopping Center

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Andover Street	114	Sylvan and Prospect Streets	0		0		0	Severe congestion	0	Peabody Danvers Shopping Center
Route 114	114		0	Danvers Town Line	0	Salem City Line	0	Does not follow direct route, high truck volume, spot location problems such as Route 114/Sylvan St. LOS F	1987	City of Peabody Traffic Study
Central Street	0		0	Route 114	114	Main Street	0	Heavy volumes	1987	City of Peabody Traffic Study
Margin Street	114	Gardner Street	114		0		0	No traffic control, AM and PM LOS F	1987	City of Peabody Traffic Study
Pulaski Street	114	Gardner Street	114		0		0	LOS F	1987	City of Peabody Traffic Study
Andover Street	114	Pulaski, Central and Endicott Sts	0		0		0	Bridge on Adover St, LOS F, accidents 79, 80 & 83 - 112	1987	City of Peabody Traffic Study
Maple Street	62	South Main Street	114		0		0	Delay, LOS E-F due to volume on Route 114	1985	Route 114 Plaza Middleton MA
Route 114	114	Mount Pleasant St, Gates St	0		0		0	LOS E	1986	Peabody/Danvers Shopping Center
North Street	114	Federal Street	0		0		0	LOS F in AM and PM, 7.5 accidents/year from 1/1/75 to 12/31/80	1986	Salem Traffic Study
Federal Street	0		0	Boston Street	107	North Street	114	Congestion, through traffic in residential neighborhood	1986	Salem Traffic Study
Chestnut Street	0	Norman And Summer Streets	114		0		0	LOS of F in AM and PM	1986	Salem Traffic Study

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Essex Street	0	North and Summer Streets	114		0		0	LOS F in AM and PM, 19 accidents/year 1/1/75 to 12/31/80	1986	Salem Traffic Study
North Street	114	Lynde Street	0		0		0	Left turn from North into Lynde St LOS F in AM and PM	1986	Salem Traffic Study
Lafayette Street	114	Derby Street	1 A		0		0	LOS C in PM Peak, 7 accidents/year 1/1/75 to 12/31/80	1986	Salem Traffic Study

APPENDIX I

ROUTE 128

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Essex Street	0		0	Colon Street	0	Route 128	128	Horizontal Alignment	1984	Traffic and Safety Improvements Study, Beverly MA
Lowell Street	0	Route 128 Ramps	128		0		0	Accidents 79, 80, & 83 - 137, LOS F	1987	City of Peabody Traffic Study
Washington Street	0		0	Western Avenue	127	Route 128	128	-	0	
Audubon Road	0	Route 128 Southbound Ramps	128		0		0	Lefts off of ramp LOS F pm	1990	Edgewater Office Park
Salem Street	0	Route 128 Northbound Ramps	128		0		0	Congestion left turns off of Ramp at LOS F	1987	Edgewater Office Park
Winn Street	0		0	Route 128	128	Woburn Town line	0		0	PWED Round 5B Grant Proposals
High Street	35		0	Sylvan Street	0	Route 128	128		0	
Route 128 Northbound Ramp	128	Sohier Road	0		0		0	Left-turn delay onto Route 128 ramp from Sohier Road, LOS F	1985	North Shore Community College and Access Road
Route 128 Northbound Ramp	128	Brimball Avenue	0		0		0	Left turn delay onto Route 128 NB ramp, LOS F	1985	North Shore Community College and Access Road
Route 128	128		0	Lynnfield Town Line	0	Danvers Town Line	0	Substandard interchanges at Route 114 and Lowell Street	1987	City of Peabody Traffic Study
Route 128 Southbound Ramp	128	Brimball Avenue	0		0		0	LOS E	1982	No Shore Community College Norwood Pond Campus FEIR
Route 128	128	Lowell Street Ramps	0		0		0	Poor geometry, LOS E 1987	1987	Analogic Corp and Centennial Industrial Park
Route 128	128	Summit Street NB on Ramp	0		0		0	Poor geometry	0	Analogic Corp and Centennial Industrial Park

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Route 128	128	Forest St. NB off Ramp	0		0		0	Poor geometry	0	Analogic Corporation and Centennial Industrial Park
Route 128	128	Trask Lane	0		0		0	Local street with sole access to Route 128	0	
Route 128	128	Eastern Avenue and Bass Avenue	127		0		0	Safety and delay	1987	

APPENDIX J

BOSTON STREET, SALEM, LOWELL STREET AND MAIN STREET, PEABODY

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Boston Street	107	Essex Street	0		0		0	LOS F in AM and PM, 11.8 accidents/year from 1/1/75 to 12/31/80	1986	Salem Traffic Study
Federal Street	0		0	Boston Street	107	North Street	114	Congestion, through traffic in residential neighborhood	1986	Salem Traffic Study
Boston Street	0	Bridge Street	107		0		0	LOS of D in PM peak, LOS F in 1991 PM peak	1991	Salem Traffic Study

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Lowell Street	0		0	Middleton Town Line	0	Main Street (Peabody Square)	0	High Volumes, safety, high truck volume	1987	City of Peabody Traffic Study
Main Street	0		0	Lowell Street (Peabody Square)	0	Salem City Line	0	High truck volume	1987	City of Peabody Traffic Study
Central Street	0		0	Route 114	114	Main Street	0	Heavy volumes	1987	City of Peabody Traffic Study
Washington Street	0		0	Lynnfield Street	0	Main Street	0	High truck volume	0	City of Peabody Traffic Study
Foster Street	0		0	Lowell Street	0	Main Street	0	High truck volume, floods, high traffic volumes	1987	City of Peabody Traffic Study
Main Street	0	Washington Street	0		0	-	0	LOS F, accidents 79, 80, & 83 - 57	1987	City of Peabody Traffic Study

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Route 1	1		0	Route 95	95	Lowell Street	0	Potential future capacity problems (1993)	1993	Crane Brook Office Park
Route 1	1	Lowell Street	0		0		0	Design of interchange cannot accommodate volume safety 1982-1984 140 accidents	0	Crane Brook Office Park
Lowell Street	0		0	Route 1	1		0	Long Delays on East bound segment, LOS E	0	Crane Brook Office Park
Prospect Street	0	Lowell Street	0		0		0	LOS D	1987	Peabody Danvers Shopping Center
Lowell Street	0		0	Middleton Town Line	0	Main Street (Peabody Square)	0	High Volumes, safety, high truck volume	1987	City of Peabody Traffic Study
Main Street	0		0	Lowell Street (Peabody Square)	0	Salem City Line	0	High truck volume	1987	City of Peabody Traffic Study
Foster Street	0		0	Lowell Street	0	Main Street	0	High truck volume, floods, high traffic volumes	1987	City of Peabody Traffic Study
Lowell Street	0	Lake Street	0		0		0	Alignment, channelization, PM LOS F Accidents 79, 80 & 83 - 32	1987	City of Peabody Traffic Study
Lowell Street	0	Russell Street	0		0		0	Sight distance, AM LOS E, PM LOS F accidents 79, 80 & 83 - 35	1987	City of Peabody Traffic Study
Lowell Street	0	Goodale Street (west)	0		0		0	Horizontal curve, accidents, AM LOS D (overall), PM LOS E (worst movement) accidents 79, 80 & 83 - 34	1987	City of Peabody Traffic Study

TRAFFIC PROBLEM IDENTIFICATION

LOCATION	RTE	AT	RTE	FROM	RTE	TO	RTE	PROBLEM IDENTIFICATION	YEAR	STUDY
Lowell Street	0	Taylor Street	0		0		0	Sight distnace, worst movement AM LOS C, PM LOS D, future LOS E for worst movement	1991	City of Peabody Traffic Study
Lowell Street	0	Johnson Street	0		0		0	LOS C AM D Pm overall, 1991 LOS E, 2006 LOS F	1991	City of Peabody Traffic Study
Lowell Street	0	Route 1 Ramps	1		0		0	Sight distance, horizontal and vertical alignment, access control, LOS F, accidents 79, 80 & 83 - 133	1987	City of Peabody Traffic Study
Lowell Street	0	Baldwin Street	0		0		0	Sight distance, Baldwin St used as a by-pass route, PM worst movement LOS D, 1991 overall LOS E	1991	City of Peabody Traffic Study
Lowell Street	0	Prospect Street	0		0		0	Horizontal curve, congestion, accidents 79, 80 & 83 - 42	1987	City of Peabody Traffic Study
Lowell Street	0	Route 128 Ramps	128		0		0	Accidents 79, 80, & 83 - 137, LOS F	1987	City of Peabody Traffic Study
Lowell Street	0	Forest Street and Regal Terrace	0		0		0	LOS F, accidents 79, 80 & 83 - 29	1987	City of Peabody Traffic Study
Lowell Street	0	Endicott Street and King Street	0		0		0	AM LOS D, PM LOS F, accidents 79, 80, & 83 - 71	1987	City of Peabody Traffic Study
Prospect Street	0	Lowell Street	0		0		0	LOS E	1986	Peabody/Danvers Shopping Center
Route 128	128	Lowell Street Ramps	0		0		0	Poor geometry, LOS E 1987	1987	Analogic Corp and Centennial Industrial Park

Addendum

Local Letters Supporting The North Shore Priorities

Essex County Commissioners Office

36 FEDERAL STREET
SALEM, MASSACHUSETTS 01970

(508) 741-0201

CAROLYN K. KROLL,
Director of County Operations

EVERETT C. HUDSON, *Chairman*
MARGUERITE P. KANE, Lawrence
CHARLES T. ARENA, Lynn

RECEIVED FEB 27 19
GRANTS

February 21, 1989

Mr. Peter Phillips, Chairman
North Shore Transportation Task Force
℅ Community Development Office
19 Harbor Loop
Gloucester, MA 01930

Dear Mr. Phillips:

The Essex County Planner, Thomas J. O'Leary, Jr., has briefed this Board on the progress made by the North Shore Transportation Task Force. The multi-community planning process has set forth clear priorities for alleviating some of the traffic problems and for improving safety for our residents and visitors. This is a very significant step forward. Lessons learned from this regional cooperative effort may well set the model for other issues of common concern.

The Board of County Commissioners have reviewed the list of project priorities and wholeheartedly lends its support to this important effort. Again, we support all efforts which recognize the value of intercommunity cooperation on problems of this scale.

Sincerely,

Charles T. Arena

Charles T. Arena, Acting Chairman,
Board of County Commissioners

CTA:dc

ESSEX BOARD OF SELECTMEN
TOWN HALL • MARTIN STREET • ESSEX, MASSACHUSETTS 01929

February 6, 1989

RESOLVED:

That the Town of Essex supports the work of the North Shore Transportation Task Force to prioritize North Shore traffic needs. The Town of Essex recognizes the identified priorities as those projects which are most important to the area given traffic and safety conditions and physical deterioration. We are pleased to have this opportunity to participate with our neighbors on the North Shore in evaluating opportunities to improve our road system, and would like to encourage the Metropolitan Planning Organization to consider these priorities as funds are allocated among the many legitimate projects which compete for funds.

John T. Guerin
John T. Guerin, Chairman

James J Barrett Jr
James J. Barrett, Jr.

Joseph N Brown Jr.
Joseph N. Brown, Jr.

BOARD OF SELECTMEN
TOWN OF ESSEX

Town of Topsfield

TOPSFIELD, MASSACHUSETTS

BOARD OF SELECTMEN

February 7, 1989

Mr. Daniel Fortier
Principal Transportation Planner
Metropolitan Area Planning Council
110 Tremont Street
Boston, MA 02108

Dear Mr. Fortier:

Please be advised that the Topsfield Board of Selectmen voted at its January 9, 1989 meeting to endorse the list of priorities recommended by the North Shore Transportation Task Force. Please see attached copies of minutes.

If you have any questions, please call the Selectmen's office at 887-8571.

Sincerely,

Holger Luther, rmk

Holger Luther
Selectman

HL/jz
201L

TOWN OF MANCHESTER

BOARD OF SELECTMEN · TOWN HALL
Manchester, Massachusetts 01944 (508) 526-1712

January 25, 1989

Peter H. Phillips, Chairman
North Shore Transportation Task Force
City Hall
191 Cabot Street
Beverly, Massachusetts 01915

Dear Mr. Phillips:

I am pleased to report that the Board of Selectmen voted unanimously on January 24, 1989 to

> support the work of the North Shore Transportation Task Force to prioritize North Shore traffic needs. The Town of Manchester recognizes the identified priorities as those projects which are most important to the area given traffic and safety conditions and physical deterioration. We are pleased to have had this opportunity to participate with our neighbors on the North Shore in evaluating opportunities to improve our road system, and would like to encourage the Metropolitan Planning Organization to consider these priorities as funds are allocated among the many legitimate projects which compete for funds.

In addition, I have notified our representatives to the Task Force and encouraged our new MAPC representative to attend your meeting on February 2nd.

Sincerely,

Paul Bockelman

Paul Bockelman
Executive Secretary

Office of the Mayor
City of Beverly
Massachusetts 01915

Mayor
F. John Monahan

Administrative Assistant
Maryann Giles

Executive Secretary
Linda Paluzzi Giallongo

Telephone
922-3311

November 15, 1988

RESOLUTION

BE IT RESOLVED that the City of Beverly supports the work of the North Shore Transportation Task Force to prioritize North Shore traffic needs. The City of Beverly recognizes the identified priorities as those projects which are most important to the area given traffic and safety conditions and physical deterioration. We are pleased to have had this opportunity to participate with our neighbors on the North Shore in evaluating opportunities to improve our road system, and would like to encourage the Metropolitan Planning Organization to consider these priorities as funds are allocated among the many legitimate projects which compete for funds.

F. John Monahan

F. John Monahan, Mayor
City of Beverly

FJM/tc

TOWN OF HAMILTON
BOARD OF SELECTMEN
HAMILTON, MASS.
01936

November 8, 1988

Mr. Statler Gilfillen
139 Cutler Road
Hamilton, MA 01936

Dear Statler:

The Board of Selectmen has voted unanimously to support the North Shore Transportation Task Force resolution.

Thank you for your interest in the MAPC.

Yours truly,
Marjorie Hansen
Marjorie Hansen
Selectman
Clerk of the Board

TOWN OF MARBLEHEAD
Planning Board
ABBOT HALL
MARBLEHEAD, MASS. 01945

October 31, 1988

Mr. Daniel J. Fortier Principal Transportation Planner MAPC

Dear Dan,

Enclosed is the "resolution which you prepared. I have signed for Marblehead, indicating our support for the priorities established by the North Shore Transportation Task Force.

Please note the corrections which I have marked on the two pages from the August '88 draft of the Final Report, attached.

Regards,

Jim

James E. Bishop
Planning Board

Town Representive to North Shore Taansportation Task Force

Attachments

JEB/ms

RESOLVED, that the town/city of Marblehead supports the work of the North Shore Transportation Task Force to prioritize North Shore traffic needs. The town/city of Marblehead recognizes the identified priorities as those projects which are most important to the area given traffic and safety conditions and physical deterioration. We are pleased to have had this opportunity to participate with our neighbors on the North Shore in evaluating opportunities to improve our road system, and would like to encourage the Metropolitan Planning Organization to consider these priorities as funds are allocated among the many legitimate projects which compete for funds..

DJF/mlm

James E. Bishop

James E. Bishop Planning Board
For the Town of Marblehead

North Shore
(Local Endorsement)

CITY OF GLOUCESTER
GLOUCESTER · MASSACHUSETTS · 01930
OFFICE OF THE CITY CLERK

August 11, 1988

Daniel J. Fortier
Transportation Planner
Metropolitan Area Planning Council
110 Tremont Street
Boston, MA. 02108

Dear Mr. Fortier:

Please be advised that the Gloucester City Council, at its regular meeting held on August 2, 1988, voted unanimously to forward a communication to you in support of the priority listings relative to State and Federal funding for road repairs at the Gloucester intersections of Route 128 at Eastern and Bass Avenues, and also to ask that consideration also be given to construction of a third lane at the intersection of Route 128 and Bass Avenue as well as the construction of a pedestrian overpass at Route 128 Extension at Grant Circle and new lighting for the A. Piatt Andrews Bridge over the Annisquam River (on Route 128) in Gloucester.

Yours very truly,

Fred J. Kyrouz
FRED J. KYROUZ
CITY CLERK

FJK/h

Nicola A. Barletta
Katherine M. Murphy

Priscilla A. Garlick, Chairman

Harry G. Shore
Frederick H. Tarr, III

BOARD OF SELECTMEN
Town of Rockport

P. O. Box 329
MASSACHUSETTS 01966-0329
TOWN OFFICE BUILDING
Phone 546-6786

RESOLUTION

ON THE REPORT OF THE NORTH SHORE TRANSPORTATION TASK FORCE

RESOLVED, that the Town of Rockport supports the work of the North Shore Transportation Task Force to prioritize North Shore traffic needs. The Town of Rockport recognizes the identified priorities as those projects which are most important to the area given traffic and safety conditions and physical deterioration. The Board of Selectmen appreciate this opportunity to participate with our neighbors on the North Shore in evaluating opportunities to improve our transportation system and would like to encourage the Metropolitan Planning Organization to consider these priorities, along with the ones listed below, as funds are allocated among the many legitimate projects which compete for funds.

Top priorities in the Cape Ann area in the opinion of the Rockport Board of Selectmen are as follows:

1. Route 127, Eastern Avenue at Route 128:

    A. Approaching Route 128 from Rockport - right lane should be right turn only. Immediate relief is needed to minimize traffic blockage and allow emergency vehicles to drive through to the Addison Gilbert Hospital.

    B. For the long range - consider one way connector road from Route 127 to Blackburn Circle, Route 128 via the Morse Industrial Park at Eastern Avenue and the Blackburn Industrial Park as a one way by-pass and emergency exit.

2. Guard rails on Route 128 North entering Blackburn Circle are a safety hazard:

    A. Small and intermediate size cars have vision blocked by guard rails and cannot see cars traveling around rotary.

3. Permanent protectors of Route 128 scenic belt from Route 22, Beverly to Grant Circle, Gloucester.
4. Eliminate safety hazards at Route 128 Interchanges at Route 114, Peabody and Route 35, Danvers.
5. Support for CATA and Rockport MBTA commuter rail line and station, including abatement of excessive noise that disturbs the neighborhood and better control of oil drippings that pollute our wetlands.

This Resolution and Top Priorities were approved by the Rockport Board of Selectmen, October 13, 1988.

Priscilla A. Garlick
Priscilla A. Garlick
Chairman

Nicola A. Barletta
Nicola A. Barletta

Katherine M. Murphy
Katherine M. Murphy

Harry G. Shore
Harry G. Shore

Frederick H. Tarr III
Frederick H. Tarr, III

BOARD OF SELECTMEN
TOWN OF ROCKPORT
MASSACHUSETTS

cc: Representative Patricia G. Fiero
Fire Chief Taber
Police Chief O'Maley

TOWN OF MIDDLETON

Ira S. Singer *Town Administrator*

April 5, 1989

Mr. Peter Philips, Chairman
North Shore Transportation Task Force
c/o Daniel Fortier
Metropolitan Area Planning Council
60 Temple Place
Boston, MA 02111

Re: Endorsement of North Shore Priorities

Dear Mr. Philips:

The Middleton Board of Selectmen voted to endorse the transportation priorities of the North Shore as adopted by the Task Force.

The Board strongly supports this process to develop a concensus on regional transportation issues and looks forward to participating, through its representative, in future discussions.

Sincerely,

Ira S. Singer
Town Administrator

Memorial Hall • 48 South Main Street • Middleton, MA 01949 • Tel. (617) 777-3617